

REMARKS

OBJECTIONS UNDER 37 C.F.R. § 1.75

The Examiner has advised Applicants that in the event claim 1 is found allowable, claim 20 would be objected to under 37 C.F.R. 1.75 as being a substantial duplicate thereof. The cancellation of claim 20 has rendered this objection moot.

REJECTIONS UNDER 35 U.S.C. § 112

The Examiner has rejected claim 20 under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicants regard as their invention. The cancellation of claim 20 has likewise rendered this rejection moot.

REJECTIONS UNDER 35 U.S.C. § 102

The Examiner has rejected claims 1, 7, and 20 under 35 U.S.C. § 102(b) as being anticipated by Japanese 52-145486. The Examiner concludes that Japan '486 teaches a first "liquid state" mixing step in which rubber latex is mixed with oil to form a mixture from which crumb is obtained and a second "liquid state" mixing state in which the crumb is mixed with rubber latex and aqueous carbon black slurry. According to the Examiner, the claim step of "mixing the premix with carbon black" reads on and does not exclude "liquid state" mixing.

Reconsideration is respectfully requested in view of the amendments that have been made. As accurately summarized by the Examiner, during the Interview Summary dated May 24, 2005, the Examiner and the undersigned attorney conducted a telephone interview on May 19, 2005, wherein the amendment to add the recitation "solid-state mixing" was discussed. In particular, the Examiner agreed that in view of pages 11 and 13 of the specification, this particular amendment is supported by the written description. Moreover, the Examiner agreed to consider this recitation in view of Japan '486. Applicants contend that Japan '486 does not teach solid-state mixing as recited in the claims, and therefore Japan '486 neither anticipates nor renders obvious the claimed invention.

REJECTIONS UNDER 35 U.S.C. § 103

The Examiner has also rejected claims 1, 7-11, 17-18 and 20 under 35 U.S.C. § 103(a) as being unpatentable over Japan '486 and optionally in view of U.S. Patent No. 3,317,458 to Willi Clas. While the Examiner believes that claims 1, 7 and 20 are anticipated by Japan '486, the Examiner nonetheless states that it would have been obvious to add one processing aid to the rubber before coagulating it to form a crumb, in view of an alleged teaching of Japan '486 that oil may be added or an alleged teaching in Willi Clas that plasticizers can be incorporated into the preliminary mixtures before coagulation of the latex. Also, with respect to claim 8, the Examiner opines that it would have been obvious to mix within a mixer having a net mixing chamber volume of at least 75 L operated at a fill factor of at least about 50 depending upon the desired amount of rubber; with respect to claim 9, the Examiner alleges that Willi Clas teaches using resin as a processing aid; with respect to claims 10-11, the Examiner opines that it would have been obvious to use a fatty acid or mixture of zinc fatty acid salts; and with respect to claim 17-18, the Examiner opines that the claimed amount of processing agent would have been obvious.

While Applicants disagree with the findings and conclusions of the Examiner with respect to the patentability of the dependent claims, the amendment made to claim 1 obviates the rejection thereof in a consistent fashion with that explained above.

REJECTIONS UNDER 35 U.S.C. § 103

The Examiner has rejected claims 2-7 and 16 under 35 U.S.C. § 103(a) as being unpatentable over Japan '486 and optionally in view of Willi Clas as applied above and further in view of U.S. Patent No. 3,824,206 to Baranwal. As to claims 2-6, the Examiner opines that it would have been obvious to one of ordinary skill in the art to add solvent to the processing aid to form a cocktail as claimed in view of Baranwal to facilitate dispersion of an additive in the water or solvent in which the rubber is dispersed by disbursing the additive in a small volume of water or solvent as is convention in making up such mixes. As to claim 3, the Examiner opines that it would have been obvious to heat the cocktail as claimed since it is taken as well known to improve dispersion by using heat; as to claims 4-6, the Examiner opines it would have been obvious to use a processing aid and oil in view of Japan '486 and Baranwal's

suggestion to oil [sic] and it is taken as well known to use both oil and a different processing aid such as a different oil; as to claim 7, the Examiner opines that it would have been obvious to isolate by drying the rubber and processing aid since Japan '486 teaches isolating by coagulation to form the crumb and it is taken as well known to mix rubber and liquid to form as a latex or solution with oil and then isolate the "premix" by coagulation if it is a latex or by evaporation if it is a solvent; as to claim 16, the Examiner opines that it would have been obvious to shape and cure vulcanizable composition into a tire in view of Baranwal's suggestion to shape and cure vulcanizable composition containing carbon black to form a tire tread.

While Applicants disagree with the findings and conclusions of the Examiner with respect to the patentability of the dependent claims, the amendment made to claim 1 obviates the rejection thereof in a consistent fashion with that explained above.

REJECTIONS UNDER 35 U.S.C. § 103

The Examiner has rejected claims 12-15 under 35 U.S.C. § 103(a) as being unpatentable over Japan '486 and optionally in view of Willi Clas as applied and further in view of U.S. Patent No. 5,332,810 to Lawson. As to claims 12-15, the Examiner opines that it would have been obvious to use fictionalized rubber as in the Japan '486 process in view of Lawson's et al.'s teaching of a functionalized rubber having a predictable molecular weight range for mixing with carbon black.

While Applicants disagree with the findings and conclusions of the Examiner with respect to the patentability of the dependent claims, the amendment made to claim 1 obviates the rejection thereof in a consistent fashion with that explained above.

CONCLUSION

In view of the foregoing amendments and arguments presented herein, the Applicants believe that they have properly set forth the invention and accordingly, respectfully request the Examiner to reconsider the rejections provided in the last Office Action. A formal Notice of Allowance of claims 1-18 is earnestly solicited. Should the Examiner care to discuss any of the foregoing in greater detail, the undersigned attorney would welcome a telephone call.

No new claims have been added and therefore no additional fees are believed

due at this time. Nonetheless, in the event that a fee required for the filing of this document is missing or insufficient, the undersigned attorney hereby authorizes the Commissioner to charge payment of any fees associated with this communication or to credit any overpayment to Deposit Account No. 06-0925.

Respectfully submitted,



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